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*AAWM*

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COMMERCIAL/INDUSTRIAL SOLID WASTE  
REDUCTION PROGRAM FOR THE MUNICIPALITY  
OF METROPOLITAN TORONTO

by  
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The Municipality of Metropolitan Toronto is dependent on its many commercial businesses and industries. Yet while companies in the area contribute to our economic growth, they also generate massive quantities of solid waste. In fact, the private sector is responsible for generating more than half of the 3.25 million tonnes of solid waste disposed of at Metropolitan facilities each year.

In recent years, the quantity of solid waste handled by Metropolitan Toronto has increased substantially. Over the period from 1983 to 1986, the quantity of waste received by Metro Toronto increased from 1.8 to 2.9 million tonnes annually. This dramatic increase can be attributed to a number of factors including the closure of other landfill sites and growth and development in the area.

Like many other urban centres, Metropolitan Toronto is facing a severe shortage of landfill capacity. Identifying and developing new landfill sites is a difficult, time-consuming and expensive process. In order to conserve our remaining landfill space, and to minimize the need for future landfills, programs are being implemented for waste reduction, reuse and recycling. Through these programs and increased landfill tipping fees, Metropolitan Toronto is working to meet the Provincial goal of 25 per cent. waste reduction by the year 1992.

In 1988, the quantity of solid waste received at Metro facilities remained at approximately the same level as 1987. This leveling off effect coincides with the implementation of several recycling programs and a major increase in landfill tipping fees for waste generated by the private sector. On May 1, 1988, rates increased from \$18.07 to \$50.00 per tonne at landfills and from \$31.58 to \$64.94 per tonne at transfer stations.

On May 1, 1989, the tipping fees increased further to \$83.33 per tonne at the landfills and \$100.00 per tonne at transfer stations. The full impact of this increase has not been realized, as it takes time for the haulers to pass the costs on to the generators. Private business also requires additional time to react by implementing waste reduction measures and recycling programs. Over the period from January 1 to March 31 of this year, the waste received at Metropolitan Toronto facilities had decreased by approximately 6 per cent over the same period last year.

In the past, many companies considered waste as a low priority item in their business planning. The Municipality of Metropolitan Toronto has undertaken a number of initiatives to help businesses to reduce and recycle their solid waste. These initiatives focus on providing industry with information and technical support to undertake recycling programs and establish policies aimed at waste minimization.

One of the barriers to recycling which is commonly cited by industry is the difficulty in locating markets for their recyclable materials. In order to assist companies, Metropolitan Toronto has produced a Recycling Market Directory. The Directory was prepared through discussions with secondary material dealers and end-use markets.

Generators of recyclable materials are advised to contact the markets for further information and to make arrangements for collection. The directory is available to any company in Metropolitan Toronto, free of charge. The markets/categories listed in the directory include:

- Asphalt, Concrete and Clean Fill
- Drums
- Food and Organic Waste
- Glass
- Metal Recovery
- Miscellaneous Material
- Plastic and Rubber
- Social Services Organizations
- Textiles
- Waste Paper
- Wood

Metropolitan Toronto also has a number of Recycling Advisors that work directly with waste generators to help companies develop programs. These staff members conduct solid waste audits of plants and offices. During site inspections, the Recycling Advisors assist companies in developing methods for waste reduction and recycling. In many cases, businesses are simply not aware of the opportunities available or alternative methods of handling solid waste.

Given the number of businesses in Metropolitan Toronto, it is important that we start by targeting materials that can be easily recovered from the waste stream. One way in which this is accomplished is through our Recycling Opportunity Notice Program. Dedicated personnel are located at all Metropolitan Toronto's transfer stations and landfill sites to visually inspect randomly selected loads of incoming waste and identify any loads that contain a high concentration of a recyclable material. Upon identifying these loads, Recycling Opportunity Notices are completed and forwarded to both the hauler and generator of the loads. The generator is encouraged to recycle future loads of the material, and is assisted in locating markets.

This program is primarily based on voluntary participation by the waste generators. However, it does provide some of the rationale for implementing mandatory measures, such as banning of specific materials.

After about one year of operating the Recycling Opportunity Notice program, it became apparent that one of the most common materials received at the landfill sites and transfer stations was corrugated cardboard. Many firms refused to recycle the material on a voluntary basis, citing problems such as lack of manpower and limited storage space. This led Metropolitan Toronto to implement a ban on corrugated cardboard. Since February 1, 1989, all loads containing more than 50 per cent. by volume of recyclable corrugated cardboard have been prohibited from all Metropolitan disposal facilities. Metropolitan Council has directed that this be reduced to all loads with over 20 per cent at all sites by September 1, 1989.

In order to enforce the cardboard ban, Metropolitan Toronto is using its existing enforcement method of issuing Violation Notices to the haulers of the material. If a hauler receives three violation notices for the same offence at the same site, the hauler is temporarily suspended from using the facility. During the first four months of the ban, over 250 violation notices have been issued. We project that the ban could divert 75,000 tonnes of cardboard per year, when fully implemented. Banning of other materials is also being considered. Materials which have alternative markets and can easily be separated from the waste stream will be considered for a ban.

Office paper is another material which has been targeted for diversion by Metropolitan Toronto. Planning statistics indicate that over 350,000 employees work in office buildings in Metropolitan Toronto. This is equivalent to about 35 per cent. of the workforce. One full-time Metro staff member will be working with businesses to implement office paper recovery programs. A second full-time staff member is developing programs for Metropolitan Toronto's own offices. As well, an office paper recovery guide is currently in production. This guide will provide business with a practical approach to setting up an office paper recovery program.

Waste tires are bulky items which are also considered a high priority for diversion. Waste tires can be remanufactured for re-use, or recycled into new products such as automotive parts. We are currently reviewing a number of proposals for diversion of waste tires.

Wood waste also has several potential uses such as horticultural and agricultural applications and use as a fuel. Following the development of alternatives for materials such as tires and wood, these materials will be banned from Metropolitan Toronto facilities.

Organic waste is another material which has other potential uses. Metropolitan Toronto is currently developing plans to construct a 190 tonne/day prototype plant for composting of organic waste. The facility will accept waste from a small number of commercial and industrial locations in Metropolitan Toronto. It will be used to establish design criteria and operating and maintenance experience for future plants which will handle larger quantities. This plant is expected to be in operation by 1991.

In order to raise the level of awareness of industry, Metropolitan Toronto is developing an education and promotion campaign. Newspaper advertisements have already been placed in the major daily newspapers. Plans are currently being developed for posters which can be used by companies to promote their recycling programs. As well, information will be available through fact sheets, brochures and booklets such as our office paper recovery guide.

Changing attitudes towards waste management is fundamental in bringing about action. Industry must realize that they can no longer generate unlimited quantities of waste as a by-product of their business. Strategies must be developed to minimize the generation of waste. Adequate resources must be allocated to deal with waste in an environmentally acceptable manner.

This change in attitude is already becoming apparent. The Board of Trade of Metropolitan Toronto recently produced a Waste Management Code of Practice which provides the private sector with a set of principles and guidelines for implementing programs for waste reduction, re-use, recycling and recovery. This type of commitment and leadership represents a new era in commercial and industrial waste management.

The corporate commitment to responsible waste management must begin at the very top. In order to encourage senior management of private corporations to increase their waste reduction and recycling efforts, Metropolitan Toronto together with the Region of Peel, the Region of Waterloo and the City of Guelph, has produced a video entitled "Pulling Together". The video emphasizes the tremendous responsibility that industry has in dealing with our solid waste crisis. It also provides practical solutions by featuring three companies that have implemented comprehensive waste management programs. The video is available for loan or purchase. Metropolitan staff use the video when conducting waste audits, and also when giving presentations to various industrial and trade associations.

The recycling success stories as a result of Metropolitan Toronto's efforts are numerous. For example, Shopsy's Foods Ltd. used to throw away all of their corrugated cardboard. This firm is now recovering 6-8 tonnes of cardboard per week. Shopsy's is also implementing a program to recycle a significant quantity of waste plastic. As well, the firm is

currently investigating whether liquid ingredients could be received in a returnable container rather than metal drums. Shopsy's has always recycled the majority of their food waste and will continue to look for new ways to cut down on other waste materials.

Boeing Canada is another firm which had developed creative solutions in solid waste management. Last summer Metropolitan Toronto issued about 30 Recycling Opportunity Notices to Boeing for the disposal of corrugated cardboard. Boeing is now recycling all corrugated cardboard as well as office paper and pop cans. The number of loads of waste being sent to landfill has been reduced by almost 50 percent. Boeing is now exploring the diversion of other materials such as plastics, wood and glass containers. As well, Boeing has taken their corporate responsibility one step further by providing their employees with information on recycling through displays and articles in employee newsletters. This firm can truly be considered a leader in the area of solid waste management.

These are just two examples of the innovative initiatives that have been implemented by industry. In Metropolitan Toronto, there are over 70,000 commercial and industrial establishments including retail outlets. A collective effort by these firms will make a difference.

The Provincial goal of 25 percent waste reduction by 1992, will only be met if business and industry implements comprehensive programs for waste reduction, re-use and recycling. Metropolitan Toronto will continue to expand its efforts to assist the private sector to make this goal a reality.



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